

REMARKS

Applicants wish to thank the examiner for the many courtesies extended to them in the interview conducted this day of March 26, 2007. The figures and claims have been amended commensurate with the examiner's comments in his letter of December 27, 2006, and pursuant to the items discussed in the interview. The amendments to the claims filed herein are believed to address the examiner's concerns and remarks, and new claims have been added claiming subject matter previously submitted and supported by the application as originally filed. It is thus believed that the present amendment places the application in condition for allowance over the prior art of record.

Claim Objections

Applicants wish to thank the examiner for his careful attention to the form and content of the claims as originally filed. The present amendments are believed to correct each and every informality noted by the examiner. More particularly, "XOR" and "OR" have been replaced by "XORing" and "ORing" where noted, and they now otherwise also appear consistently in the claims as presently amended. Claim language has been amended to eliminate confusing use of the terms "operation" and "act", the claims as amended now using the conventional method term "step" consistently throughout. The claims have been amended to consistently replace the term "partial result" with "partial value," and informalities with regard to antecedent references to the term "partial value" have been corrected.

It is also believed that the present amendments to claim 1 eliminate confusion caused by claim terminology informalities as to the generation of separate partial values associated with each of the first and second rotator positions. As presently amended, claim 1 now clearly provides steps for generating a partial value associated to a first "set" rotator position, including steps involving replacement of partial values with ORing stepped results, and also clearly claiming subsequent steps that generate a partial value associated to a second "set" rotator position, and which does not include the step of replacing the partial value associated to the first set rotator position with the partial value associated to the second set rotator position. Thus, as presently amended, the claim 1 step of "combining" these partial values to generate a global value is believed enabled and allowable.

Claim 3 has been cancelled and new claims 10-12 have been added claiming subject matter regarding the combining of partial values associated to each of the different rotator positions. New claims 10-12 are believed to be supported by the specification as originally filed, and more particularly by the discussion of formatting data; see page 13, line 23, through page 14, line 30 of the specification as originally filed, and figures 5 and 8. New claims 10-12 are also believed to claim method steps consistent with a process supported by said specification selection and figures 5 and 8.

Claim Rejections – 35 USC § 112

Claims 1-8 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as their invention. Claims 1, 2 and 4-8 have been amended, claim 3 has been cancelled, and new claims 9-12 have been added. Each of the claims as amended or submitted is believed to be definite and in compliance with and allowable under 35 USC § 112, second paragraph.

More particularly, the method steps of amended claim 1 do not claim replacement of the partial value associated with the first rotator position with the partial value associated with the second rotator position, rather the determination of separate partial values associated to each of the first and second rotator positions, and thus the step of combining separate partial values associated with each of the first and second rotator positions is believed definite and fully supported by the specification as originally filed (see page 13, line 23, through page 14, line 30 of the specification as originally filed, and figures 5 and 8). Moreover, informalities with regard to proper antecedent basis for sampling and shifting steps and terms are believed to be corrected by the present amendments.

Preamble references with regard to "analyzing the quality of a high-speed signal" have been deleted. Instead, an additional last step limitation ("analyzing the global value to determine a quality of the high speed signal") has been added by amendment. Thus, the preamble, and amended claim 1 as a whole, are now believed to be definite and allowable under 35 USC § 112, second paragraph.

And lastly, confusion over the meaning of the claim 3 limitation of "repeating the last four acts" has been obviated by the cancellation of claim 3. New claims 10-12 provide a new articulation of subject matter incorporated in canceled claim 3. And as discussed above with

respect to the "Claim objections", new claims 10-12 are fully supported by the specification as originally filed.

New claim 9 claims subject matter wherein the step of analyzing further comprises constructing a digital eye from the corrected global value and analyzing the digital eye to determine the quality of the high speed signal. This matter is also fully supported by the specification as originally filed (see, for example, the specification at page 11, lines 10-23, and figures 5-10). New claims 9-12 are thus believed to accurately, clearly and definitely claim method steps fully supported by the specification and figures as originally filed, and are thus believed allowable under 35 USC § 112, second paragraph.

Drawings

The drawings stand objected to under 37 CFR § 1.83(a) as not showing every feature of the invention specified in the claims. As discussed above, the step of combining the partial values associated to said first and second positions into a global value as claimed by amended claim 1 is fully supported by the drawings, and in particular element 505 of Figure 5 and Figure 8. The process steps 800-825 illustrated in Figure 8 clearly teach the step of combining the partial values as presently claimed, and more particularly as described in the specification. (See page 13, line 23, through page 14, line 30 of the specification as originally filed.)

It is thus believed that the amendments to the claims discussed above have also corrected any deficiencies as to support for the subject matter now claimed by the drawings as originally filed. The figures as originally filed are thus believed to fully support amended claim 1 without the need for additional features or amendments, or the need to cancel any features from the claims. And as discussed above, no new matter is believed to have been incorporated by the present amendment to the claims.

Pursuant to the examiner's comments, Figures 1-3 have been amended to incorporate the legend "Prior Art". And Figure 10 has been amended to correctly identify the subject matter illustrated therein as "an algorithm used to correct the global value, i.e. box 510 of figure 5". (See the specification as originally filed at page 17, lines 12-13.) Through an informality, Figure 10 as originally filed was mistakenly labeled as illustrating element 515. The present amendment provides correction consistent with and fully supported by the specification as

originally filed, and thus does not constitute new matter. The figures as originally filed and as presently amended are thus now all believed to be allowable under 37 CFR § 1.83(a).

Double Patenting

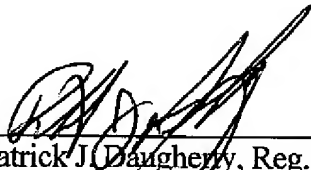
Claims 1-8 stand rejected under a non-statutory obviousness-type double patenting rejection over claims 1-4 of commonly-owned U.S. Patent No. 6990418. A terminal disclaimer in compliance with 37 CFR 1.321(c) is enclosed to overcome the rejection. Accordingly, the obviousness-type double patenting rejection should be withdrawn. See MPEP 1490.

Conclusion

In view of the above, each of the claims in the application is now believed in condition for allowance, and an early indication of allowability is earnestly solicited.

Respectfully submitted,

Date: March 26, 2007



Patrick J. Daugherty, Reg. No. 41,697
CUSTOMER NO. 26675

Attachments